



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,186	10/29/2001	Damon John Ennis	10.0402	4116

21919 7590 05/31/2007  
MEREK, BLACKMON & VOORHEES, LLC  
673 S. WASHINGTON ST.  
ALEXANDRIA, VA 22314

EXAMINER
----------

PHAM, KHANH B

ART UNIT	PAPER NUMBER
----------	--------------

2166

MAIL DATE	DELIVERY MODE
-----------	---------------

05/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/003,186

**Applicant(s)**

ENNIS ET AL.

**Examiner**

Khanh B. Pham

**Art Unit**

2166

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-13,15-21,23,24,33-48 and 61-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,7-16 and 63-70 is/are allowed.
- 6) ☒ Claim(s) 4,5,17-21,23,24 and 33-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 5, 2007 has been entered.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 17-21, 23-24 and 33-48** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 17-21, 23-24 are directed to "an apparatus". However, all components of the claimed "apparatus" are, or could be implemented, using software routine. The claimed "apparatus" therefore isn't really an apparatus, it's software per se; lacking any hardware to make it an actual apparatus. The claims need to recite at least one hardware component which enables the functionality to be realized.

Claims 33-48 are directed to "a computer readable medium comprising instructions", where the specification does not provide antecedent basis for the term

"computer readable medium". In the context of the claim, the "computer readable medium" could be interpreted as a set of instructions. The claimed subject matter are therefore directed to a set of instructions and rejected as not being tangibly embodied.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 4 recites the limitation "said namespace" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

6. Claims 1-3, 7-13, 15-16, 61-70 are allowed.

***Response to Arguments***

7. Applicant's arguments, see Applicant's remark page 31-33, filed March 5, 2007, with respect to the 103(a) rejections have been fully considered and are persuasive. In view of the newly amended claims, the rejection of claims 1-5, 7-13, 15-21, 23-24, 33-48, 61-70 based upon Bracho and AAPA has been withdrawn.

Art Unit: 2166

8. Applicant's arguments filed March 5, 2007 regarding the 101 rejection to claims 17-24 and 33-48 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding the 35 U.S.C 101 rejection to claims 17-24, Applicant argued that "there is no requirement for an Applicant's invention to be embodied in any physical form". The examiner respectfully submits that all components of the claimed "apparatus" are or could be implemented using software routine. The specification does not provide any hardware structure for the "communication coordinator" to support applicant's argument that the communicator coordinator is a hardware device. On the other hand, claim 33 provides an embodiment where the communication coordinator is implemented using instructions, or software: "instruction by a communication coordinator for causing one or more processor within one of a plurality of line modules to receive subscription request.". The claimed "apparatus" comprises only software modules, lacking any hardware to make it an actual apparatus. The claims need to recite at least one hardware component which enables the functionality to be realized.

**Regarding claims 33-48**, applicant argued that claim 33 includes "instructions by a communication coordinator within a first line module" and "processor within a control module". The physical embodiment of the claim can be in processing signals in a computer to comply with § 101". However, Claim 33 is directed to "a computer readable medium comprising instructions...;" therefore, the "processor" is clearly not the subject matter of the claimed invention. The specification does not provide antecedent basis for the term "computer readable medium". In the context of the claim, the "computer

readable medium” could be interpreted as a set of instructions. The claimed subject matter are therefore directed to a set of instructions and rejected as not being tangibly embodied. The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility provides: “Functional descriptive material, per se, is not statutory. This is exemplified in re Warmerdam 31 USPQ2d 1754 where the rejection of a claim to a disembodied data structure was affirmed. Thus **a claim to a data structure, per se, or other functional descriptive material, including computer programs, per se, is not patent eligible subject matter.**

Functional descriptive material claimed in combination with an appropriate computer readable medium to enable the functionality to be realized is patent eligible subject matter if it is capable of producing a useful, concrete and tangible result when used in the computer system. Compare Warmerdam to In re Lowry 32 USPQ2d 1031 where a memory with a data structure that increased computing efficiency was patentable.

**The computer readable medium must be physical structure** which provides the functional descriptive material in usable form to permit the functionality to be realized with the computer. A program product which does not explicitly include such a medium, a program per se, a signal or other type of transmission media that fails to include the hardware necessary to realize the functionality (e.g., a transmitter or a receiver), and a piece of paper with the functional descriptive material written on it are all examples of media which are not believed to enable the functionality to be realized with the computer.

In this case, claims 33-48 are directed to "computer readable medium", however, the claim languages indicate that the computer readable medium is not physical structure, but instead comprises only "instructions". For example, claim 33 states: "A computer readable medium comprising instruction" at line 1 and "said computer readable medium comprising: instructions by ....." at line 12. In order for claims 33-48 to be statutory, claims 33-48 should be amended to avoid the ambiguity discussed above. For example, claims 33 should read: "A computer readable medium storing instructions, wherein the instructions when executed by one or more processor, cause ....., said instructions comprising:"

### ***Conclusion***

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is (571) 272-3574 for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham  
Primary Examiner  
Art Unit 2166



May 25, 2007